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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,681	04/20/2001	Gary J. Sullivan	MS1-599US	1807

22801 7590 09/01/2004

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER

CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/839,681

Applicant(s)

SULLIVAN ET AL.

Examiner

Dave Czekaj

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 20 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 12, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman (6252917).

Regarding claims 1, 12, and 13, Freeman discloses an apparatus that relates to the decoding of received signals (Freeman: column 1, lines 5-7). This apparatus comprises “identifying one or more characteristics of one or more elements of a media processing system” (Freeman: column 9, lines 56-67, wherein the characteristics is the buffer occupancy, the elements are the buffers and decoders, the media processing system is illustrated in figure 3) and “dynamically negotiating which element of a processing system will perform certain processing tasks based in part on the identified characteristics of the elements” (Freeman: column 9, lines 56-67- column 10, lines 1-33, wherein the negotiating is the passing of information from the decoder to the scheduler, the processing tasks is the decoding, the characteristics are the number of iterations the decoder has carried out, the programmed number of iterations which the

decoder is undergoing to decode a current packet, and/or data describing a convergence rate).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (6252917) in view of Owen et al. (6414996), (hereinafter referred to as "Owen").

Regarding claim 2, note the examiners rejection for claims 1, 12, and 13, and in addition, claim 2 differs from claims 1, 12, and 13 in that claim 2 further requires an application program interface (API). Owen teaches that an API enables the capture and playback of multimedia streams which can contain video and audio data compressed in a wide variety of formats (Owen: column 9, lines 39-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Freeman and add the API taught by Owen in order to obtain an apparatus that is more versatile by being able to capture and play a variety of multimedia streams.

Regarding claim 3, Freeman discloses "generating a negotiation data structure in accordance with a proposed set of processing capabilities" (Freeman: column 10, lines 11-33, wherein the negotiation data structure is the

number of iterations the decoder has carried out, the programmed number of iterations which the decoder is undergoing to decode a current packet, and/or data describing a convergence rate), "issuing the negotiation structure to one or more elements" (Freeman: column 10, lines 11-33, wherein the issuing is the process of passing the information to the element or scheduler), "determining whether each of the elements accepted the negotiation structure" (Freeman: column 10, lines 11-33, wherein the determining is the process of the scheduler updating its schedule, which would indicate the structure has been accepted), and "executing processing tasks within the proposed capabilities if the negotiation structure is accepted by the elements" (Freeman: column 10, lines 11-33, wherein executing the tasks is assigning the packets to the decoders based on the information previously obtained).

Regarding claim 4, Freeman discloses "generating another negotiation structure in accordance with another set of processing capabilities, if the media system did not accept the negotiation structure" (Freeman: column 9, lines 52-67 – column 10, lines 1-10, wherein the another negotiation structure is the buffer occupancy) and "iteratively performing the issuing, determining, and generating steps until the system elements accept a negotiation structure" (Freeman: column 9, lines 56-67- column 10, lines 1-33, wherein the iterative step is the process of continuously buffering items until a structure has been accepted and the data has been processed).

Regarding claim 5, Freeman discloses "generating operational data structures to pass between the system elements to facilitate shared decoding of multimedia content between processing elements" (Freeman: column 11, lines 1-14, wherein the operational data structures is the prediction of the first-to-finish decoder based on buffer space and time).

Regarding claim 6, Owen discloses "the data structures include at least one residual difference structure and one macroblock control command structure" (Owen: column 9, lines 20-33, wherein the residual structure is the residual difference and the macroblock structure is the macroblock prediction error).

5. Claims 7-11, 14-9, 21, and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (6252917) in view of Owen et al. (6414996), (hereinafter referred to as "Owen") in further view of Dao et al. (6275891), (hereinafter referred to as "Dao").

Regarding claims 7 and 21, note the examiners rejection for claim 2, and in addition, claims 7 and 21 differ from claim 2 in that claims 7 and 21 further require a raw bitstream to pass content from a decoder to an accelerator. Dao teaches that accelerators efficiently and quickly carry out specific algorithms. Dao further discloses "a raw bitstream data structure generated to pass content from a decoder to an accelerator" (Dao: column 8, lines 16-31, wherein the raw bitstream structure is the message for the accelerator to start performing the IDCT). Therefore, it would have been obvious to one having ordinary skill in the

art at the time the invention was made to take the apparatus disclosed by Freeman, add the API taught by Owen, and add the accelerator taught by Dao in order to obtain an apparatus that operates more efficiently by having dedicated systems perform tasks other systems are to inefficient to perform.

Regarding claim 8, Owen discloses "the data structures include auto-negotiation data structures" (Owen: column 10, lines 33-36, wherein the auto-negotiation structures is the navigation information).

Regarding claim 9, Owen discloses "the auto-negotiation structures include connection mode structures denoting a set of system capabilities that indicate capabilities needed for decoding data in a specified format" (Owen: column 10, lines 34-46, wherein the connection mode structure is the navigation information, the specified formats are AC-3, MPEG, sub-picture, and MPEG-2).

Regarding claim 10, Freeman discloses "the auto-negotiation structures include connection configuration structure denoting a proposed split in media between system elements" (Freeman: column 9, lines 35-38, wherein the connection configuration structure is the buffer occupancy and iterations which determine how the media will be split or divided).

Regarding claim 11, note the examiners rejection for claims 4 and 9.

Regarding claim 14, note the examiners rejection for claims 7, 8, and 10.

Regarding claims 15-18, note the examiners rejection for claims 9-10.

Regarding claim 19, note the examiners rejection for claim 6.

Regarding claims 23-25, note the examiners rejection for claim 14.

Regarding claim 26, note the examiners rejection for claims 3-4.

Regarding claim 27, note the examiners rejection for claims 3-4 and 10.

Regarding claim 28, note the examiners rejection for claims 5 and 9-10.

Allowable Subject Matter

6. Claims 20 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

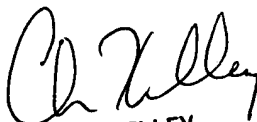
US-6687806	02-2004	McGrath, Kevin J.
US-5961632	10-1999	Shiell et al.
US-6459737	10-2002	Jiang, Hong
US-6313845	11-2001	Terry et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600